



2019 Northern California Earthquake Hazards Workshop
May 1–2, 2019
USGS, Menlo Park, California

AGENDA

Wednesday, May 1

9:00-9:15 a.m. **Welcoming Remarks**

Keith Knudsen, Northern California Earthquake Hazards Coordinator (USGS)
Sarah Minson, Workshop Overview (USGS)

The 1969 Santa Rosa earthquakes: 50th anniversary

9:15-10:50 am **Santa Rosa earthquake hazards: then and now**

Speakers:

Ivan Wong (LCI) The 1969 Santa Rosa sequence: lessons in hazard, losses, and risk in moderate earthquakes [20 min]

Vicki Langenheim (USGS) What lies beneath Santa Rosa can shake you: what we have learned about basin structure since 1969 [20 min]

Suzanne Hecker (USGS) Mapping the long-hidden trace of the Rodgers Creek Fault through central Santa Rosa using lidar topography and subsurface imaging [20 min]

Gareth Funning (UC Riverside) Surface and subsurface creep along the Rodgers Creek-Maacama fault zone revealed by InSAR and repeating earthquakes [20 min]

Discussion: 15 min

Moderator: Sarah Minson (USGS)

10:50-11:15 a.m. **Break**

11:15 a.m.-12:15 p.m.

Rebuilding after natural disasters: perspectives from Santa Rosa and beyond

Speakers:

Martha Blair Tyler (previously with Spangle Associates) Seizing opportunities after the 1969 Santa Rosa earthquakes [20 min]

Gabe Osburn (Deputy Director of Development Services, City of Santa Rosa) Rebuilding and revisioning after the fires [20 min]

Sara McBride (USGS) Exploring community complexities for recovery after the Canterbury and Kaikoura earthquakes in New Zealand [20 min]

Discussion: 15 min

Moderator: Suzanne Hecker (USGS)

12:15-1:45 p.m. **Lunch + Poster Session**

1:45-3:30 p.m. **Jack Boatwright's scientific legacy**

Speakers:

Paul Richards (Lamont-Doherty Earth Observatory) The young Jack in grad school: what was important in the 1970s, and have we learned anything since? [25 min]

Massimo Cocco, Daniela Pantosti (INGV) Thoughts from colleagues at INGV [25 min]

George Choy (USGS) Jack Boatwright: Pioneer in broadband seismology and his contributions to global seismology [25 min]

Mary Lou Zoback and Howard Bundock (Stanford University and USGS) Shaky times: Jack Boatwright's contributions and legacy at the USGS [25 min]

Moderators: Pat McCrory (USGS) and Keith Knudsen (USGS)

3:30-4:30 p.m. **Personal remembrances of Jack**

Moderators: Pat McCrory (USGS) and Keith Knudsen (USGS)

4:30 p.m. Reception honoring the life of Jack Boatwright

Thursday, May 2

9:00-11:00 a.m. **Creeping faults and their hazards**

Speaker:

Ruth Harris (USGS) Large earthquakes and creeping faults [25 min]

Ben Brooks (USGS) The importance of seeing shallow: near-field geodesy, shallow fault slip and creeping faults [25 min]

Morgan Page (USGS) How creep is handled in UCERF3 [25 min]

Kaj Johnson (Indiana University) Mechanisms of steady and non-steady creep on the central San Andreas fault [25 min]

Discussion: 20 min

Moderator: David Schwartz (USGS)

11:00 a.m.-12:00 p.m. Lightning Talks: Everything You Want to Know About Current Earthquake Research in Northern California in Less than an Hour! Brad Aagaard (USGS), Annemarie Baltay (USGS), Michael Barall (Invisible Software), Jeanne Hardebeck (USGS), Kim Blisniuk (SJSU), Tom Brocher (USGS), Dave Croker (USGS), Collin Cronkite-Ratcliff (USGS), Francisco Galvis (Stanford), Yann Gavillot (OSU), Chris Goldfinger (OSU), Don Hoirup (CA Dept. of Water Resources), Christopher Hitchcock (Infraterra), Özgür Kozacı (Infraterra), Shannon Klotsko (SDSU), Keith Knudsen (USGS), Chris Madugo (PG&E), Kathryn Materna (UC Berkeley), Chris Milliner (JPL, NASA), Nicholas Novoa (CA Dept. of Water Resources), Arben Pitarka (LLNL), Yogesh Prashar (EBMUD), Arthur Rodgers (LLNL), Alianora Walker (SJSU), Charles Wang (UC Berkeley), Patrick Williams (Williams Associates)

Moderator: Sarah Minson (USGS) [1 slide and 3 min per speaker]

12:00-1:30 p.m. **Lunch + Poster Session**

1:30-3:30 p.m. **Other hot topics**

Speaker:

Mostafa Mousavi (Stanford) Deep learning of earthquake signals [25 min]

Zhongwen Zhan (Caltech) Fiber seismology: a new way to build dense seismic networks [25 min]

Danielle Hutchings Mieler (Office of Resilience and Capital Planning, City and County of San Francisco) San Francisco's tall buildings study [25 min]

Discussion: 15 min

Moderator: Brad Aagaard (USGS)

3:30 p.m. Concluding Remarks, Keith Knudsen

3:45 p.m. Adjourn

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